```
clear all
format long
nins = 639780;
T1 = 639780001; %ns

temps_ins = T1/nins
```

```
temps_ins =
     1.000000001563037e+03
```

v1

```
T_inf_v1_tar = 639707001;
cami_critic_v1_tar = T_inf_v1_tar/temps_ins
```

```
cami_critic_v1_tar =
     6.397070000001141e+05
```

```
cami_critic_v1_nostre = (110+100442+103144+57444+103144+57444+103144+57444+57444+0)
```

```
cami_critic_v1_nostre =
      639760
```

```
T_inf_v1_nostre = cami_critic_v1_nostre*temps_ins
```

```
T_inf_v1_nostre =
     6.397600009999686e+08
```

```
Parallelism_v1 = T1 / T_inf_v1_nostre
```

```
Parallelism_v1 =
   1.000031261723146
```

v2

```
T_inf_v2_tar = 361190001;
cami_critic_v2_tar = T_inf_v2_tar/temps_ins
```

```
cami_critic_v2_tar =
     3.611900004354466e+05
```

```
cami_critic_v2_nostre = (57+100442+10305+57444+10305+57444+10305+57444+57444+0)
```

```
cami_critic_v2_nostre =
      361190
```

```
T_inf_v2_nostre = cami_critic_v2_nostre*temps_ins
```

```
T_inf_v2_nostre =
```

```
3.611900005645534e+08
```

```
Parallelism_v2 = T1 / T_inf_v2_nostre
```

```
Parallelism_v2 =
   1.771311498103491
```

v3

```
T_inf_v3_tar = 154354001;
cami_critic_v3_tar = T_inf_v3_tar/temps_ins
```

```
cami_critic_v3_tar =
     1.543540007587390e+05
```

```
cami_critic_v3_nostre = (57+100442+10305+5735+10305+5735+10305+5735+5735+0)
```

```
cami_critic_v3_nostre =
      154354
```

```
T_inf_v3_nostre = cami_critic_v3_nostre*temps_ins
```

```
T_inf_v3_nostre =
     1.543540002412611e+08
```

```
Parallelism_v3 = T1 / T_inf_v3_nostre
```

```
Parallelism_v3 =
   4.144887725617735
```

v4

```
T_inf_v4_tar = 64018001;
cami_critic_v4_tar = T_inf_v4_tar/temps_ins
```

```
cami_critic_v4_tar =
     6.401800089993748e+04
```

```
cami_critic_v4_nostre = (128+10035+10305+5735+10305+5735+10305+5735+5735+0)
```

```
cami_critic_v4_nostre =
       64018
```

```
T_inf_v4_nostre = cami_critic_v4_nostre*temps_ins
```

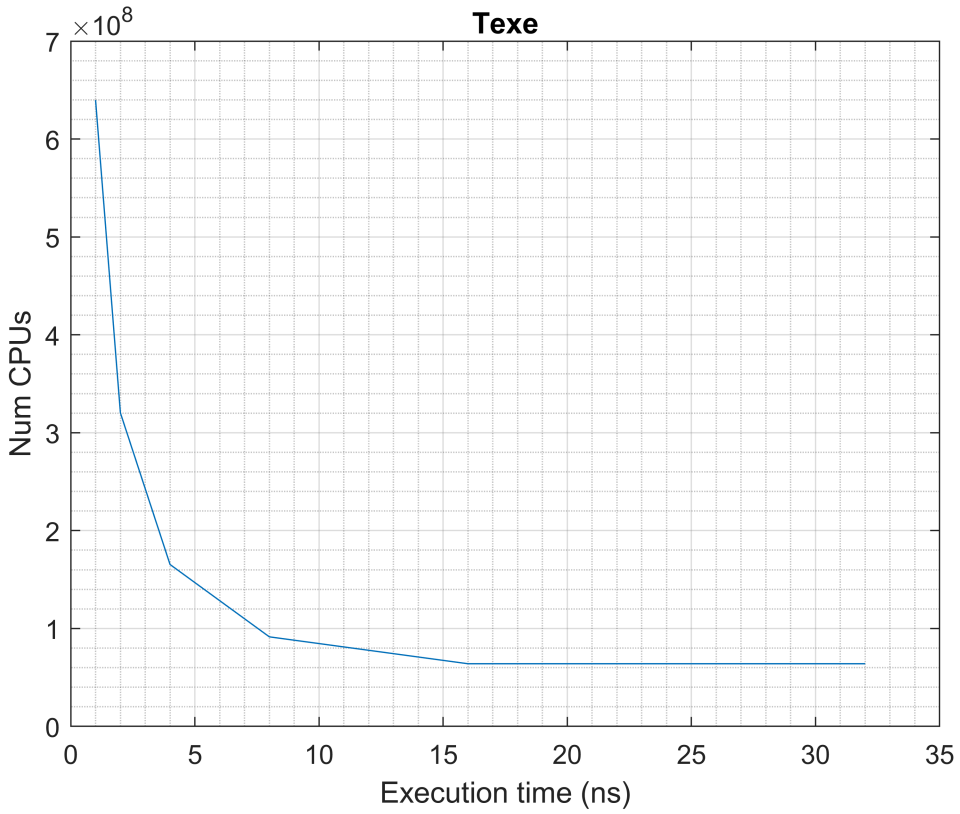
```
T_inf_v4_nostre =
     6.401800010006252e+07
```

```
Parallelism_v4 = T1 / T_inf_v4_nostre
```

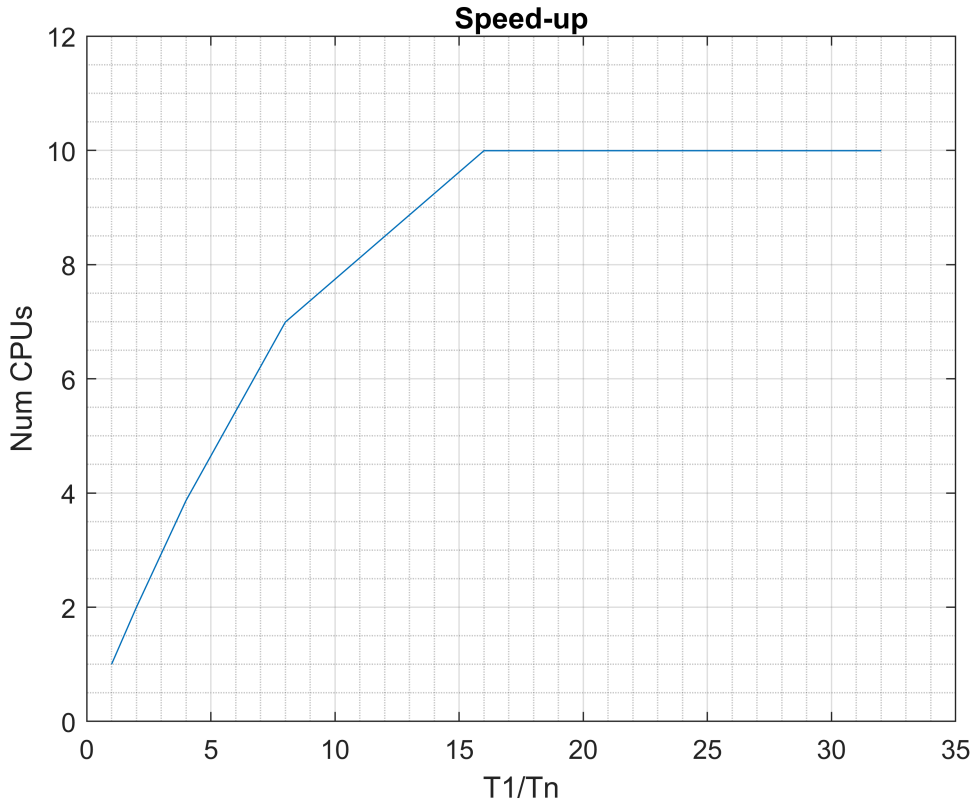
```
Parallelism_v4 =
   9.993751757318254
```

```
T1_v4 = 639780001;
T2_v4 = 320310001;
T4_v4 = 165389001;
T8_v4 = 91496001;
T16_v4 = 64018001;
T32_v4 = 64018001;

x = [1 2 4 8 16 32];
y_v4 = [T1_v4 T2_v4 T4_v4 T8_v4 T16_v4 T32_v4];
plot(x,y_v4), title("Texe"), xlabel("Execution time (ns)"), ylabel("Num CPUs"), grid on, grid
```




```
plot(x,T1./y_v4, 35, 12), title("Speed-up"), xlabel("T1/Tn"), ylabel("Num CPUs"), grid on, gri
```



v5

```
T_inf_v5_tar = 27971001;
cami_critic_v5_tar = T_inf_v5_tar/temps_ins
```

```
cami_critic_v5_tar =
     2.797100095628028e+04
```

```
cami_critic_v5_nostre = (970+20+1065+1022+5735+1022+5735+1022+5735+5735+0)
```

```
cami_critic_v5_nostre =
       28061
```

```
T_inf_v5_nostre = cami_critic_v5_nostre*temps_ins
```

```
T_inf_v5_nostre =
     2.806100004386039e+07
```

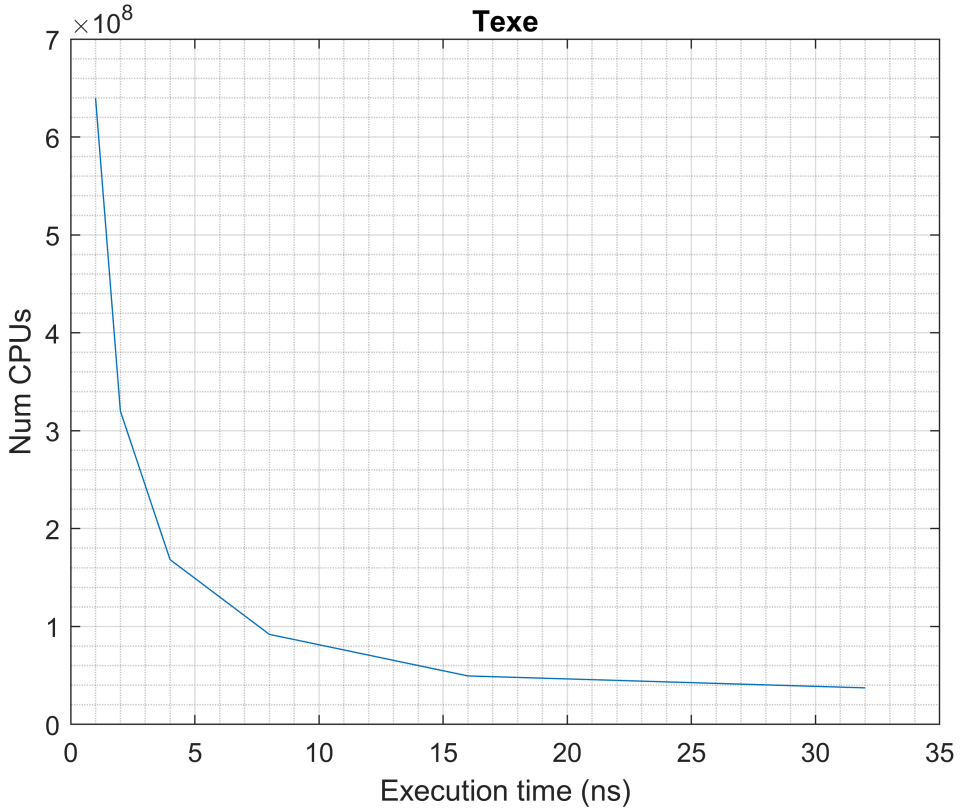
```
Parallelism_v5 = T1 / T_inf_v5_nostre
```

```
Parallelism_v5 =
  22.799615124193721
```

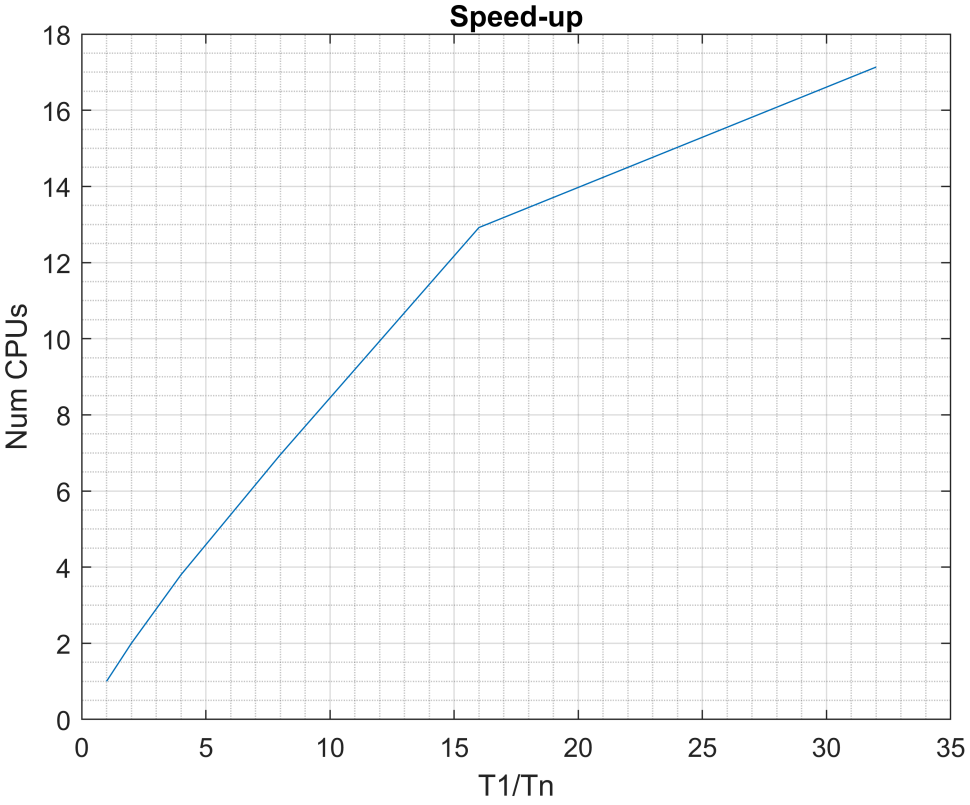
```
T1_v5 = 639780001;
T2_v5 = 320020001;
```

```
T4_v5 = 168343001;
T8_v5 = 92001001;
T16_v5 = 49520001;
T32_v5 = 37337001;

x = [1 2 4 8 16 32];
y_v5 = [T1_v5 T2_v5 T4_v5 T8_v5 T16_v5 T32_v5];
plot(x,y_v5), title("Texe"), xlabel("Execution time (ns)"), ylabel("Num CPUs"), grid on, grid m
```




```
plot(x,T1./y_v5, 35, 18), title("Speed-up"), xlabel("T1/Tn"), ylabel("Num CPUs"), grid on, grid
```


Speed-up
Num CPUs
T1/Tn
0
2
4
6
8
10
12
14
16
18
0
5
10
15
20
25
30
35